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			ART UNIT	PAPER NUMBER

2673

DATE MAILED: 03/31/2004

*21*

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/719,523

Applicant(s)

ISONO ET AL.

Examiner

Prabodh M Dharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 34-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. **Status:** Receipt is acknowledged of papers submitted on 02-26-2004 under amendments and new claims have been placed of record in the file. Claims 34-53 are pending in this action.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 34-44, 48-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Takegami et al. (6,288,485 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding Claim 34, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons from an electron source (Col. 7, Lines 4-6, Col. 4, Lines 32-

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42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); a pulse generating circuit for generating pulse signals at a predetermined time period (Col. 18, Lines 11-30, each horizontal sync the control circuit lights up each individual pixel through a switch that supplies the data for the pixel, since each horizontal scan is has fixed number of pixels the control circuit generate predetermined number of pulses per data for the pixels Col. 17, Lines 38-44, Lines 47-62, Col. 17, Line 63 to Col. 18, line 10); and a control circuit for stopping output from the scanning circuit and/or the modulation circuit to the display panel until said pulse generating circuit generates a predetermined number of pulse signals pulse (Col. 18, Lines 11-30, each horizontal sync the control circuit lights up each individual pixel through a switch that supplies the data for the pixel, since each horizontal scan a fixed predetermined time period, and has fixed number of pixels the control circuit generate predetermined number of pulses per data for the pixels Col. 17, Lines 38-44, Lines 47-62, Col. 17, Line 63 to Col. 18, line 10); signals in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 35, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a

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fluorescent substance with electrons from an electron source (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); a pulse generating circuit for generating pulse signals at a predetermined time period (Col. 18, Lines 11-30, each horizontal sync the control circuit lights up each individual pixel through a switch that supplies the data for the pixel, since each horizontal scan is has fixed number of pixels the control circuit generate predetermined number of pulses per data for the pixels Col. 17, Lines 38-44, Lines 47-62, Col. 17, Line 63 to Col. 18, Line 10, Col. 18, Lines 47-52); and a control circuit for controlling said scanning circuit and/or said modulation circuit so as to output the scanning signal and/or the modulation signal (Col. 18, Lines 47-52) after said pulse generating circuit generates a predetermined number of pulse signals after a power source is turned on (Col. 18, Lines 11-30, each horizontal sync the control circuit lights up each individual pixel through a switch that supplies the data for the pixel, since each horizontal scan a fixed predetermined time period, and has fixed number of pixels the control circuit generate predetermined number of pulses per data for the pixels Col. 17, Lines 38-44, Lines 47-62, Col. 17, Line 63 to Col. 18, Line 10, Col. 16, Line 50 to Col. 17, Line 14, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 36, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a

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fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons (Col. 7, Lines 4,5, Col. 4, Lines 21-42, figure 9A, 9B, Col. 15, Lines 22-28) from an electron source; a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping output from the scanning circuit and/or the modulation circuit to the display panel until a signal output from the scanning circuit and/or the modulation circuit to the display panel is determined in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 37, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for delaying output of a signal from the scanning circuit and/or the modulation circuit to the display panel after a power source is turned on in starting image display by outputting a signal from the scanning circuit and/or the

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modulation circuit to the display panel, wherein the signal output from the scanning circuit and/or the modulation circuit to the display panel is determined during the delay time (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan, however, during the retrace time signal to pane is delayed from control circuit and also from scan circuit and modulation circuit Col. 18, Lines 11-53).

Regarding Claim 38, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping output from the scanning circuit and/or the modulation circuit to the display panel until a power source voltage of the scanning circuit and/or the modulation circuit reaches a desired value in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

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Regarding Claim 39, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for delaying output of a signal from the scanning circuit and/or the modulation circuit to the display panel after a power source is turned on in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel, wherein a power source voltage of the scanning circuit and/or the modulation circuit reaches a desired value during the delay time (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 40, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52);



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and a control circuit for stopping supply of the acceleration potential until a power source voltage of the scanning circuit and/or the modulation circuit reaches a desired value in starting image display by outputting, a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 41, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for delaying supply of the acceleration potential after a power source is turned on in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel, wherein a power source voltage of the scanning circuit and/or the modulation circuit reaches a desired value during the delay time (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at

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the end of vertical scan, however, during the retrace time signal to pane is delayed from control circuit and also from scan circuit and modulation circuit Col. 18, Lines 11-53).

Regarding Claim 42, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); a control circuit for stopping output of a signal from the scanning circuit and/or the modulation circuit to the display panel, and then stopping supply of power to the scanning circuit and/or the modulation circuit In turning off a power source while an image is displayed by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel.

Regarding Claim 43, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines

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47-52); and a control circuit for stopping output of a signal from the scanning circuit and/or the modulation circuit to the display panel, and then stopping supply of power to the scanning circuit and/or the modulation circuit in performing emergency shutdown (Col. 15, Lines 13-28) while an image is displayed by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 44, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping output of a signal from the scanning circuit and/or the modulation circuit to the display panel, and then stopping supply of power to the scanning circuit and/or the modulation circuit when a voltage abnormality (Col. 15, Lines 22-28) is observed while an image is displayed by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and

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detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 48, Takegami et al. teaches the electron source comprises a plurality of row-direction wiring lines for receiving a scanning signal, a plurality of column-direction wiring lines for receiving a modulation signal, and a plurality of electron-emitting devices connected to the row-direction wiring lines and the column-direction wiring lines (Col. 3, Lines 52-67, Col. 17, Line to Col. 18, Line 10).

Regarding Claim 49, Takegami et al. teaches the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 500 V than a potential applied to emit electrons in the electron source (Col. 4, Lines 21-31, Several hundred volts, 100-900V).

Regarding Claim 50, Takegami et al. teaches the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 3,000 V than a potential applied to emit electrons in the electron source (Col. 4, Lines 21-31, Several kV, 1kV-999kV).

Regarding Claim 51, Takegami et al. teaches the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 5,000 V than a potential applied to emit electrons in the electron source (Col. 17, Lines 53-62).

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Regarding Claim 52, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons (Col. 7, Lines 4,5, Col. 4, Lines 21-42, figure 9A, 9B, Col. 15, Lines 22-28) from an electron source; a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a pulse generating circuit for generating pulse signals at predetermined time period (Col. 18, Lines 11-30, each horizontal sync the control circuit lights up each individual pixel through a switch that supplies the data for the pixel, since each horizontal scan is has fixed number of pixels the control circuit generate predetermined number of pulses per data for the pixels Col. 17, Lines 38-44, Lines 47-62, Col. 17, Line 63 to Col. 18, Line 10, Col. 18, Lines 47-52); and a control circuit for stopping supply of the acceleration potential (Col. 4, Lines 21-42) until said pulse generating circuit outputs a predetermined number of pulse signals in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel (Col. 18, Lines 11-30, each horizontal sync the control circuit lights up each individual pixel through a switch that supplies the data for the pixel, since each horizontal scan a fixed pre determined time period, and has fixed number of pixels the control circuit generate predetermined number of pulses per data for the pixels Col. 17, Lines 38-44, Lines 47-62, Col. 17, Line 63 to Col. 18, Line 10, Col. 16, Line 50 to Col. 17, Line 14, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops

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modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan

Col. 18, Lines 11-53).

Regarding Claim 53, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons (Col. 7, Lines 4,5, Col. 4, Lines 21-42, figure 9A, 9B, Col. 15, Lines 22-28) from an electron source; a scanning circuit for supplying a scanning signal to the display panel (Col. 17, Lines 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a pulse generating circuit for generating pulse signals at predetermined time period (Col. 18, Lines 11-30, each horizontal sync the control circuit lights up each individual pixel through a switch that supplies the data for the pixel, since each horizontal scan is has fixed number of pixels the control circuit generate predetermined number of pulses per data for the pixels Col. 17, Lines 38-44, Lines 47-62, Col. 17, Line 63 to Col. 18, Line 10, Col. 18, Lines 47-52); and a control circuit for controlling said acceleration potential supply circuit so as to supply the acceleration potential (Col. 4, Lines 21-42) after said pulse generating circuit outputs a predetermined number of pulse signals after a power source is turned on (Col. 18, Lines 11-30, each horizontal sync the control circuit lights up each individual pixel through a switch that supplies the data for the pixel, since each horizontal scan a fixed pre determined time period, and has fixed number of pixels the control circuit generate predetermined number of pulses per data for the pixels Col. 17, Lines 38-44, Lines 47-

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62, Col. 17, Line 63 to Col. 18, Line 10, Col. 16, Line 50 to Col. 17, Line 14, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 45, 46, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takegami et al. (6,288,485) in view of Stendardo et al. (6,064,125) and Kataoka et al. (5,751,925).

Regarding Claim 45, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation a fluorescent substance with electrons (Col. 7, Lines 4,5) from an electron source to (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52);

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and a first power source for supplying power to the acceleration potential supply circuit and/or the scanning circuit and/or the modulation circuit (Col. 17, Line 47 to Col. 18, Line 52).

However, Takegami et al. fails to teach a second power source for supplying power.

However, Stendardo et al. teaches a second power source for supplying power (Backup power supply (Col. 1, Lines 52-67).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Stendardo et al. in Takegami et al. teaching for having an uninterruptible power supply unit in a self-contained housing for coupling between an adapter and an electronic device with polarity sensing system and a polarity switch.

Takegami et al. teaches a first power source for supplying power to the acceleration potential supply circuit and/or the scanning circuit and/or the modulation circuit (Col. 17, Line 47 to Col. 18, Line 52).

However, Takegami et al. fails to teach a control circuit to stop using the power for video driving circuits from said second power source.

However, Kataoka et al. teaches a control circuit to stop using the power for video driving circuits from said second power source (Col. 6, Lines 11-17, Lines 33-41, Col. 9, Lines 10-67).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Kataoka et al. in Takegami et al. teaching for having an uninterruptible power supply unit and reduce power consumption.



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Regarding Claim 46, Takegami et al. teaches the abnormal state is emergency shutdown (Col. 15, Lines 9-28).

Regarding Claim 47, Stendardo et al. teaches the second power source comprises a capacitor or a battery (Col. 3, lines 53-58).

### *Response to Arguments*

6. Applicant's arguments with respect to claims 34-45, 52, and 53 have been considered but are moot in view of the new ground(s) of rejection.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references either anticipate or render the claims obvious. In order to not to be repetitive and exhaustive, the examiner did draft additional rejection based on those references.

### *Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 703-605-1231. The examiner can normally be reached on M-F 8AM to 5PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-3054938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

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March 25, 2004

A handwritten signature in black ink, appearing to read 'Vijay Shankar', written in a cursive style.

**VIJAY SHANKAR**  
PATENT EXAMINER